
Deb8: collaborative fact checking

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ABSTRACT

The rise of fake news, often from politicians and source generators, is a common problem in journalism. It affects not only mainstream media but also draws into question the trustworthiness of much information seen online. To improve the accuracy and impartiality of journalism we introduce Deb8, a collaborative tool for fact checking in videos which can enhance the transparency of news production while engaging the public in constructive social discourse around topics under active debate.

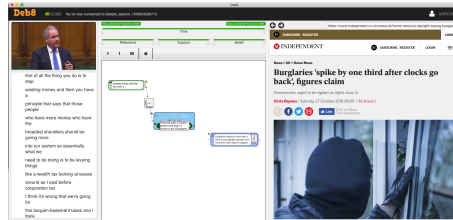
KEYWORDS

Collaborative debate analysis, argumentation, transparency

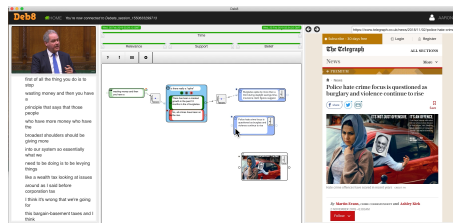
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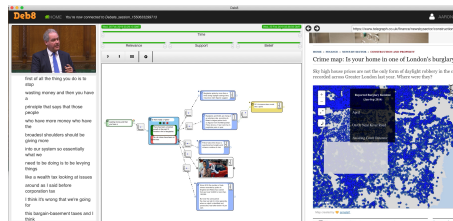
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Sidebar 1: Is there a “Spike in Aggravated Burglaries” in the UK? Feb 14, 2019



Sidebar 2: Developing the evidence basis on Aggravated Burglaries



Sidebar 3: Locating a data source on Aggravated Burglaries in the UK

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INTRODUCTION

Formal debating to discuss topics of interest has a long history with modern formats dating back to our earliest democracies. Leaders’ debates are well established as important events to help people to understand arguments, ideas, opinions and proposals of all the candidates running for a specific role or high office. The idea of giving people the chance to listen to and ask questions of their future leaders, is a popular way to engage and help them to make good decisions before voting. Within this, the media has always played an important role in this process, amplifying, questioning or simply serving as the voice of the voters along with checking the facts.

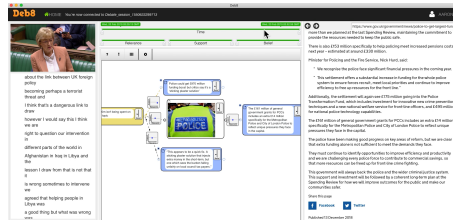
However, this type of debate can be very superficial, tedious or even difficult for the audience to extract any valuable information from [1]. This is further exacerbated if audiences do not have the context or tools to help them develop a deep understanding of the discussed issues. For example, a candidate can make a statement about the economic situation of their own country, presenting misleading data, untruths or just lies as pieces of evidence to support their argument. Both the audience and journalists involved in covering the debate can struggle to check the source of this information or make sense with what the candidate says. Such statements, whether true or false, delivered with conviction and force can easily sway voters to stick in the collective memory of those watching as fact. For society this presents a problem.

While social media has been used for years to engage the audience and to show opposing arguments not discussed in the live debate, it doesn’t facilitate deep discussions or the development of an evidence basis or foundation for rationale argumentation. Simply put, social media doesn’t have the features to support discussions at different levels of arguments, sub-arguments, to rate any evidence presented or even deconstruct opinions. For social discourse around debates and similar forms of social engagement, this presents a problem.

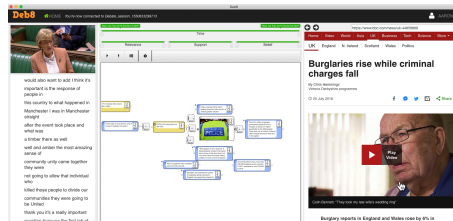
To overcome these problems, we propose a new approach to discussing real-time or recorded media such as leader debates. While we focus on leadership debates in this workshop paper our intent here is to explore a much wide range of scenarios and use cases with our new visual language tool that we call *Deb8*.

SCENARIO

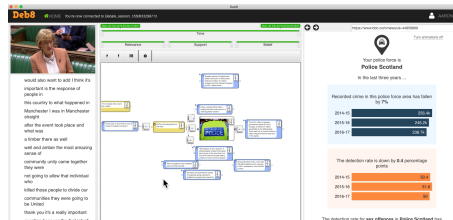
Before describing *Deb8* let us first consider the following scenario in which a group of journalists at a local newspaper need to write an article about a televised debate (such as “question time”) that



Sidebar 4: How is the £970m being used?



Sidebar 5: Evidence on the use of the money emerges.



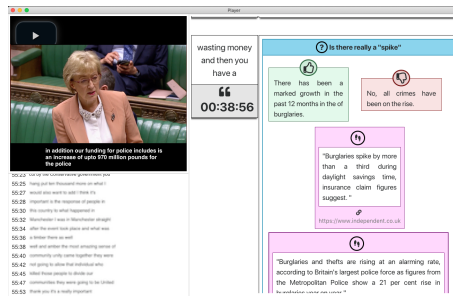
Sidebar 6: Local evidence of the impact of the funding.

took place on Feb 14, 2019 [3]. The editor wants to respect the facts and show the truth behind each speaker's discourse besides adding contradicting views for their arguments. In order to do this, this group of journalists will bring the most important quotes said by each speaker. They will start a discussion around each of them, trying to find evidence that perhaps corroborates or contradicts the speaker's statements. Each journalist contributes to this discussion with their own opinion and questions regarding a piece of evidence or simply a quote. This discussion extends to several levels of sub-arguments and branches out into different points of view. In addition, each journalist is responsible for evaluating the relevance of evidence brought to this discussion. In the end, they need to achieve consensus regarding how trustworthy each speaker's proposals are. They need to review each point of view and collaboratively write the article in order to bring their best understanding and impartial view of this televised debate.

Once the article is complete, revised and published, the editor decides to open the journalist's discussion to a student newspaper group. This starts a different level of discussion where the second group of student journalists can learn from the professional journalists while bringing even more elements to the understanding of this debate. Finally, the editor decides to share both the original and enriched versions to the public who can not only judge what the journalists produced but they can see the enriched discussion with more points of view from the student newspaper group. The public can hence add and explore the arguments focusing on relevant and important points discussed by each speaker during the televised debate.

DEB8

To realise this scenario, and similar activities, Deb8 is a new type of web-media tool that can be used by a group of journalists and hence the wider public. Deb8 supports deep analysis of media, facilitating direct linking with existing knowledge and opinions, enabling collaboration between people with different points of views besides helping the users to manage complexity. In order to make the user interface(UI) easy, we created three vertical panels used to display the video and captions, the argument canvas and the web browser as shown in Figures 1 to 7. The central panel contains an infinite zoomable argument canvas that allows the journalists to build a shared graph of argument chains by creating arbitrarily complex combinations of simple elements derived from argument theory [2], as shown in Figure 3 with eight nodes. In order to facilitate this, we decided to treat arguments as simply as possible, not mapping their structure based on premises and conclusions. The canvas allows journalists (or others) to create opinions or questions dragging their widgets from the toolbar. Quotes and evidence are created from the video player and from the web browser, shown on the left and right of Figures 1 to 7. Since all the elements of the UI are inter-connectable, journalists just need to drag and drop into this powerful zoomable canvas and the widget stores information about the timestamp of the video, its correspondent caption plus, in case of the web browser, the web



Sidebar 7: Player view in Deb8 to explore the arguments developed.

page where the source was extracted. Deb8 treats evidence as a fragment of text, image or URL that is directly linked their source on web.

Deb8 has another important feature: it allows journalists to rate each widget and their connections based on relevance and importance, as shown in Figure 3 with small square edge widgets.

DISCUSSION

This position paper has introduced the design and implementation of Deb8, a new web-based tool for collaborative analysis of video debates. Our approach addresses the specific problem of lack of depth on analysis in debate videos. One of the main assumptions is that the form of media provided, and how it is structured, can have a profound impact in how arguments are analysed and understood, both for journalists and the general public. Simultaneously, this new form of highly-interlinked media might make deeper thought more accessible to a broader public, since it makes more explicit the nature and structure of the arguments.

The project raises also a number of questions that are open for debate. First, will this kind of media make argumentation and evidence more accessible and easy to understand? Is the additional complexity in the interface compensated by the additional visibility of the argument structure? Is the interface design sufficiently flexible to support use by people with different backgrounds and ways of understanding a debate? How can this kind of tool fit within the workflows of journalists and the general public?

CONCLUSION

The accuracy and impartiality of quality journalism may be enhanced and extended with open, online tools for evidenced based fact checking, where journalists may improve fairness by identifying corroborating or conflicting evidence for debate claims. By opening up the reasoning process, journalists can increase transparency and hence engage their readership as active co-creators of knowledge, rather than simply passive recipients.

ACKNOWLEDGMENTS

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